

AMENDMENTS TO THE CLAIMS

1-18. (Cancelled).

19. (Previously Presented) Ciliary muscle for evaluating the effect of a medicine against asthenopia, comprising:

ciliary muscle from a non-human animal in a state of asthenopia, wherein said asthenopia is caused by contracting said ciliary muscle *in vitro* repeatedly by the use of a smooth muscle contraction-inducing means until said ciliary muscle shows a decrease of $50 \pm 30\%$ in the tension of muscular contraction.

20. (Previously Presented) The ciliary muscle according to claim 19 or claim 23, wherein said ciliary muscle shows a decrease of $50 \pm 20\%$ in the tension of muscular contraction.

21. (Previously Presented) The ciliary muscle according to claim 19 or claim 23, wherein said ciliary muscle shows a decrease of $50 \pm 10\%$ in the tension of muscular contraction.

22. (Previously Presented) The ciliary muscle according to claim 23, wherein the inducer of smooth muscle contraction comprises a chemical stimulant selected from the group consisting of acetylcholine, serotonin, histamine, muscarine, nicotine and endothelin.

23. (Previously Presented) Ciliary muscle for evaluating the effect of a medicine against asthenopia, comprising:

ciliary muscle from a non-human animal in a state of asthenopia, wherein said asthenopia is caused by repeatedly contracting said ciliary muscle *in vitro* with an inducer of smooth muscle contraction comprising at least one inducer selected from the group consisting of a chemical stimulant, and an electrical stimulant, wherein said ciliary muscle shows a decrease of $50 \pm 30\%$ in the tension of muscular contraction.

24. (Previously Presented) A method of preparing an *in vitro* experimental model for evaluating the effect of a medicine against asthenopia, which comprises:

inducing repeated contractions of ciliary muscle derived from a non-human animal *in vitro* until said ciliary muscle shows a decrease of $50 \pm 30\%$ in the tension of muscular contraction, wherein said contractions are achieved with an inducer of smooth muscle contraction comprising at least one inducer selected from the group consisting of a chemical stimulant, and an electrical stimulant.

25. (Previously Presented) A method for evaluating the effect of a medicine against asthenopia, comprising:

contacting the ciliary muscle from a non-human animal according to claim 23 with said medicine, and

measuring the effect of said medicine on the contraction of said ciliary muscle.

26. (Previously Presented) The method of claim 25, wherein the effect of the medicine is evaluated by comparing the decrease in tension of muscular contraction before and after contacting with the medicine.

27. (Previously Presented) The method claimed of claim 25, carried out with use of a Magnus apparatus.

28. (New) A method of evaluating the effect of a medicine against asthenopia, which comprises the steps of:

- (1) (a) stimulating a ciliary muscle derived from a non-human test animal with a chemical stimulant to induce a first contraction of said ciliary muscle, and washing said ciliary muscle at a point where the contraction reaches a plateau; and
(b) repeating step (a) 3 to 50 times and terminating at a point where said ciliary muscle shows a decrease of $50 \pm 20\%$ in the tension of muscle contraction, thereby producing *in vitro* asthenopia of the ciliary muscle;
- (2) contacting said ciliary muscle with a medicine in the presence of said chemical stimulant, and
- (3) comparing the decrease in the tension of the muscular contraction before and after contact with the medicine.

29. (New) The method of Claim 28, wherein said ciliary muscle in step (b) of (1) shows a decrease of $50 \pm 10\%$ in the tension of muscular contraction.

30. (New) The method of Claim 28, wherein the chemical stimulant is selected from the group consisting of acetylcholine, serotonin, histamine, muscarine, nicotine and endothelin.

31. (New) The method Claim 29, wherein the chemical stimulant is selected from the group consisting of acetylcholine, serotonin, histamine, muscarine, nicotine and endothelin.

32. (New) The method of Claim 28, carried out with use of a Magnus apparatus.

33. (New) The method of Claim 29, carried out with use of a Magnus apparatus.

34. (New) The method of Claim 30, carried out with use of a Magnus apparatus.

35. (New) A method of evaluating the effect of a medicine against asthenopia, which comprises the steps of:

- (1) (a) suspending a ciliary muscle derived from a non-human test animal in a Magnus apparatus equipped with a tensile transducer,
- (b) stimulating the ciliary muscle with a chemical stimulant to induce a first contraction of said ciliary muscle, and washing said ciliary muscle at a point where the contraction reaches a plateau; and

- (c) repeating step (b) 3 to 50 times and terminating at a point where said ciliary muscle shows a decrease of $50 \pm 20\%$ in the tension of muscle contraction, thereby producing *in vitro* asthenopia of the ciliary muscle;
- (2) contacting said ciliary muscle with a medicine in the presence of said chemical stimulant, and
- (3) comparing the decrease in the tension of the muscular contraction before and after contact with the medicine.

36. (New) The method of Claim 35, wherein said ciliary muscle in step (c) of (1) shows a decrease of $50 \pm 10\%$ in the tension of muscular contraction.

37. (New) The method of Claim 35, wherein the chemical stimulant is selected from the group consisting of acetylcholine, serotonin, histamine, muscarine, nicotine and endothelin.

38. (New) The method of Claim 36, wherein the chemical stimulant is selected from the group consisting of acetylcholine, serotonin, histamine, muscarine, nicotine and endothelin.